## AMENDMENT

*In the Claims*

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A hit control system for a lithotripter, the hit-control system being configured to monitor effects of a shockwave to a target area inside a body of a patient, the system comprising:

a shockwave generator;

an ultrasonic transmitting/receiving unit comprising an ultrasonic transducer configured to emit ultrasonic pulses and to receive ultrasonic waves reflected from a target area of the shockwave generator; and

an evaluating unit, in communication with the ultrasonic transmitting/receiving unit, ~~configured to determine~~ that determines a correlation coefficient $K_{1,2}$ ~~(K)~~ of a time correlation between ~~the ultrasonic waves and the ultrasonic pulses and to provide~~ a first reflected ultrasonic wave $e_1(t)$ and a second reflected ultrasonic wave $e_2(t)$, the reflected ultrasonic waves corresponding to successively emitted ultrasonic pulses that are reflected in the target area in which a target object is located, and the correlation being determined for a certain interval of time, wherein the correlation coefficient $K_{1,2}$ is determined by $\int_{T_1}^{T_2} e_1(t) * e_2(t)dt$, wherein the interval of time is determined by the points in time $T_1$ and $T_2$, and wherein the evaluating unit provides a signal related to the correlation coefficient $K_{1,2}$. ~~(K).~~

2. (Currently Amended) The system of claim 1, wherein the evaluating unit ~~is configured to determine~~ determines a temporal cross correlation function between the ultrasonic waves and to define the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

3. (Original) The system of claim 1, wherein the ultrasonic transducer of the ultrasonic transmitting/receiving unit is mounted on an adjustable holder.

4. (Original) The system of claim 1, wherein the ultrasonic transmitting/receiving unit is a part of an imaging ultrasonic scanner.

5. (Original) The system of claim 1, wherein the ultrasonic transducer is a pin probe.

6. (Original) The system of claim 1, further comprising an X-ray locating device.

7. (Currently Amended) The system of claim 1, wherein the evaluating unit ~~is configured to provide~~ provides an error signal if, after emission of a shockwave, the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined first threshold value.

8. (Currently Amended) The system of claim 7, wherein the evaluating unit ~~is further configured to average~~ averages the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a plurality of shockwaves.

9. (Currently Amended) The system of claim 7, wherein the evaluating unit ~~is further configured to standardize~~ standardizes the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference minimum value of a reference correlation coefficient curve.

10. (Currently Amended) The system of claim 7, further comprising means for the continuous representation of the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a treatment duration.

11. (Original) The system of claim 7, further comprising an alarm device in communication with the evaluating unit and supplied with the error signal.

12. (Currently Amended) The system of claim 11, wherein the alarm device ~~is configured to output~~ outputs an optical alarm or acoustic alarm.

13. (Currently Amended) The system of claim 7, wherein the shockwave generator is in communication with the evaluating unit and ~~configured to stop or continue~~ stops or continues the generation of shockwaves dependent on the error signal.

14. (Original) The system of claim 7, wherein the evaluating unit comprises adjusting means for adjusting the first threshold value.

15. (Currently Amended) The system of claim 7, wherein the evaluating unit ~~is configured to determine~~ determines a temporal cross correlation function between the ultrasonic waves ~~and~~ to define the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

16. (Original) The system of claim 7, wherein the ultrasonic transducer of the ultrasonic transmitting/receiving unit is mounted on an adjustable holder.

17. (Original) The system of claim 7, wherein the ultrasonic transmitting/receiving unit is a part of an imaging ultrasonic scanner.

18. (Original) The system of claim 7, wherein the ultrasonic transducer is a pin probe.

19. (Original) The system of claim 7, further comprising an X-ray locating device.

20. (Currently Amended) The system of claim 1, wherein the evaluating unit ~~is configured to provide~~ provides an error signal if, after emission of a shockwave, a relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined second threshold value.

21. (Currently Amended) The system of claim 20, wherein the evaluating unit ~~is further configured to average~~ averages the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a plurality of shockwaves.

22. (Currently Amended) The system of claim 20, wherein the evaluating unit ~~is further configured to standardize~~ standardizes the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference relaxation time of a reference correlation coefficient curve.

23. (Currently Amended) The system of claim 20, further comprising means for the continuous representation of the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a treatment duration.

24. (Original) The system of claim 20, further comprising an alarm device in communication with the evaluating unit and supplied with the error signal.

25. (Currently Amended) The system of claim 24, wherein the alarm device ~~is configured to output~~ outputs an optical alarm or acoustic alarm.

26. (Currently Amended) The system of claim 20, wherein the evaluating unit ~~is configured to determine~~ determines the relaxation time ($T_R$) by adapting a fit curve or a curve of the form $1 - A^{(-t/T_R)}$ to the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ with time.

27. (Currently Amended) The system of claim 26, wherein the evaluating unit ~~is further configured to smooth~~ smoothes the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

28. (Currently Amended) The system of claim 20, wherein the shockwave generator is in communication with the evaluating unit and ~~configured to stop or continue~~ stops or continues the generation of shockwaves dependent on the error signal.

29. (Original) The system of claim 20, wherein the evaluating unit comprises adjusting means for adjusting the second threshold value.

30. (Currently Amended) The system of claim 20, wherein the evaluating unit ~~is configured to determine~~ determines a temporal cross correlation function between the ultrasonic waves ~~and~~ to define the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

31. (Original) The system of claim 20, wherein the ultrasonic transducer of the ultrasonic transmitting/receiving unit is mounted on an adjustable holder.

32. (Original) The system of claim 20, wherein the ultrasonic transmitting/receiving unit is a part of an imaging ultrasonic scanner.

33. (Original) The system of claim 20, wherein the ultrasonic transducer is a pin probe.

34. (Original) The system of claim 20, further comprising an X-ray locating device.

35. (Currently Amended) The system of claim 1, further comprising a display device in communication with the evaluating unit and ~~configured to display~~ that displays the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ with time.

36. (Currently Amended) The system of claim 35, wherein the evaluating unit ~~is further configured to smooth~~ smoothes the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

37. (Currently Amended) The system of claim 35, wherein the evaluating unit ~~is configured to provide~~ provides an error signal if, after emission of a shockwave, the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined first threshold value.

38. (Currently Amended) The system of claim 37, wherein the evaluating unit ~~is further configured to average~~ averages the minimum value over a plurality of shockwaves.

39. (Currently Amended) The system of claim 37, wherein the evaluating unit ~~is further configured to standardize~~ standardizes the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference minimum value of a reference correlation coefficient curve.

40. (Currently Amended) The system of claim 37, further comprising means for the continuous representation of the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a treatment duration.

41. (Original) The system of claim 37, further comprising an alarm device in communication with the evaluating unit and supplied with the error signal.

42. (Currently Amended) The system of claim 41, wherein the alarm device ~~is configured to output~~ outputs an optical alarm or acoustic alarm.

43. (Currently Amended) The system of claim 37, wherein the shockwave generator is in communication with the evaluating unit and ~~configured to stop or continue~~ stops or continues the generation of shockwaves dependent on the error signal.

44. (Original) The system of claim 37, wherein the evaluating unit comprises adjusting means for adjusting the first threshold value.

45. (Currently Amended) The system of claim 37, wherein the evaluating unit ~~is configured to determine~~ determines a temporal cross correlation function between the ultrasonic waves ~~and~~ to define the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

46. (Original) The system of claim 37, wherein the ultrasonic transducer of the ultrasonic transmitting/receiving unit is mounted on an adjustable holder.

47. (Original) The system of claim 37, wherein the ultrasonic transmitting/receiving unit is a part of an imaging ultrasonic scanner.

48. (Original) The system of claim 37, wherein the ultrasonic transducer is a pin probe.

49. (Original) The system of claim 37, further comprising an X-ray locating device.

50. (Currently Amended) The system of claim 35, wherein the evaluating unit ~~is configured to provide~~ provides an error signal if, after emission of a shockwave, a relaxation

time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined second threshold value.

51. (Currently Amended) The system of claim 50, wherein the evaluating unit ~~is further configured to average~~ averages the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a plurality of shockwaves.

52. (Currently Amended) The system of claim 50, wherein the evaluating unit ~~is further configured to standardize~~ standardizes the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference relaxation time of a reference correlation coefficient curve.

53. (Currently Amended) The system of claim 50, further comprising means for the continuous representation of the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a treatment duration.

54. (Original) The system of claim 50, further comprising an alarm device in communication with the evaluating unit and supplied with the error signal.

55. (Currently Amended) The system of claim 54, wherein the alarm device ~~is configured to output~~ outputs an optical alarm or acoustic alarm.

56. (Currently Amended) The system of claim 50, wherein the evaluating unit ~~is configured to determine~~ determines the relaxation time ($T_R$) by adapting a fit curve or a curve of the form $1 - A^{(-t/T_R)}$ to the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ with time.

57. (Currently Amended) The system of claim 56, wherein the evaluating unit ~~is further configured to smooth~~ smoothes the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

58. (Currently Amended) The system of claim 50, wherein the shockwave generator is in communication with the evaluating unit and ~~configured to stop or continue~~ stops or continues the generation of shockwaves dependent on the error signal.

59. (Original) The system of claim 50, wherein the evaluating unit comprises adjusting means for adjusting the second threshold value.

60. (Currently Amended) The system of claim 50, wherein the evaluating unit ~~is configured to determine~~ determines a temporal cross correlation function between the ultrasonic waves and to define the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

61. (Original) The system of claim 50, wherein the ultrasonic transducer of the ultrasonic transmitting/receiving unit is mounted on an adjustable holder.

62. (Original) The system of claim 50, wherein the ultrasonic transmitting/receiving unit is a part of an imaging ultrasonic scanner.

63. (Original) The system of claim 50, wherein the ultrasonic transducer is a pin probe.

64. (Original) The system of claim 50, further comprising an X-ray locating device.

65. (Currently Amended) The system of claim 1, wherein the evaluating unit ~~is configured to determine~~ determines the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ based on the ultrasonic waves assigned to the ultrasonic pulses directly succeeding one another.

66. (Currently Amended) The system of claim 65, wherein the evaluating unit ~~is configured to provide~~ provides an error signal if, after emission of a shockwave, the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined first threshold value.

67. (Currently Amended) The system of claim 66, wherein the evaluating unit ~~is further configured to average~~ averages the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a plurality of shockwaves.

68. (Currently Amended) The system of claim 66, wherein the evaluating unit ~~is further configured to standardize~~ standardizes the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference minimum value of a reference correlation coefficient curve.

69. (Currently Amended) The system of claim 66, further comprising means for the continuous representation of the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a treatment duration.

70. (Original) The system of claim 66, further comprising an alarm device in communication with the evaluating unit and supplied with the error signal.

71. (Currently Amended) The system of claim 70, wherein the alarm device ~~is configured to output~~ outputs an optical alarm or acoustic alarm.

72. (Currently Amended) The system of claim 66, wherein the shockwave generator is in communication with the evaluating unit and ~~configured to stop or continue~~ stops or continues the generation of shockwaves dependent on the error signal.

73. (Original) The system of claim 66, wherein the evaluating unit comprises adjusting means for adjusting the first threshold value.

74. (Currently Amended) The system of claim 66, wherein the evaluating unit ~~is configured to determine~~ determines a temporal cross correlation function between the ultrasonic waves and to define the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

75. (Original) The system of claim 66, wherein the ultrasonic transducer of the ultrasonic transmitting/receiving unit is mounted on an adjustable holder.

76. (Original) The system of claim 66, wherein the ultrasonic transmitting/receiving unit is a part of an imaging ultrasonic scanner.

77. (Original) The system of claim 66, wherein the ultrasonic transducer is a pin probe.

78. (Original) The system of claim 66, further comprising an X-ray locating device.

79. (Currently Amended) The system of claim 65, wherein the evaluating unit ~~is configured to provide~~ provides an error signal if, after emission of a shockwave, a relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined second threshold value.

80. (Currently Amended) The system of claim 79, wherein the evaluating unit ~~is further configured to average~~ averages the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a plurality of shockwaves.

81. (Currently Amended) The system of claim 79, wherein the evaluating unit ~~is further configured to standardize~~standardizes the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference relaxation time of a reference correlation coefficient curve.

82. (Currently Amended) The system of claim 79, further comprising means for the continuous representation of the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a treatment duration.

83. (Original) The system of claim 79, further comprising an alarm device in communication with the evaluating unit and supplied with the error signal.

84. (Currently Amended) The system of claim 83, wherein the alarm device ~~is configured to output~~outputs an optical alarm or acoustic alarm.

85. (Currently Amended) The system of claim 79, wherein the evaluating unit ~~is configured to determine~~ determines the relaxation time ($T_R$) by adapting a fit curve or a curve of the form $1 - A^{(-1/T_R)}$ to the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ with time.

86. (Currently Amended) The system of claim 85, wherein the evaluating unit ~~is further configured to smooth~~ smoothes the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

87. (Currently Amended) The system of claim 79, wherein the shockwave generator is in communication with the evaluating unit and ~~configured to stop or continue~~ stops or continues the generation of shockwaves dependent on the error signal.

88. (Original) The system of claim 79, wherein the evaluating unit comprises adjusting means for adjusting the second threshold value.

89. (Currently Amended) The system of claim 79, wherein the evaluating unit ~~is configured to determine~~determines a temporal cross correlation function between the ultrasonic waves and to define the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~correlation coefficient $K_{1,2}$.

90. (Original) The system of claim 79, wherein the ultrasonic transducer of the ultrasonic transmitting/receiving unit is mounted on an adjustable holder.

91. (Original) The system of claim 79, wherein the ultrasonic transmitting/receiving unit is a part of an imaging ultrasonic scanner.

92. (Original) The system of claim 79, wherein the ultrasonic transducer is a pin probe.

93. (Original) The system of claim 79, further comprising an X-ray locating device.

94. (Currently Amended) The system of claim 75, further comprising a display device in communication with the evaluating unit and ~~configured to display~~ that displays the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ with time.

95. (Currently Amended) The system of claim 94, wherein the evaluating unit ~~is further configured to smooth~~ smoothes the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

96. (Currently Amended) The system of claim 94, wherein the evaluating unit ~~is configured to provide~~ provides an error signal if, after emission of a shockwave, the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined first threshold value.

97. (Currently Amended) The system of claim 96, wherein the evaluating unit ~~is further configured to average~~ averages the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a plurality of shockwaves.

98. (Currently Amended) The system of claim 96, wherein the evaluating unit ~~is further configured to standardize~~ standardizes the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference minimum value of a reference correlation coefficient curve.

99. (Currently Amended) The system of claim 96, further comprising means for the continuous representation of the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a treatment duration.

100. (Original) The system of claim 96, further comprising an alarm device in communication with the evaluating unit and supplied with the error signal.

101. (Currently Amended) The system of claim 100, wherein the alarm device ~~is configured to output~~ outputs an optical alarm or acoustic alarm.

102. (Currently Amended) The system of claim 96, wherein the shockwave generator is in communication with the evaluating unit and ~~configured to stop or continue~~ stops or continues the generation of shockwaves dependent on the error signal.

103. (Original) The system of claim 96, wherein the evaluating unit comprises adjusting means for adjusting the first threshold value.

104. (Currently Amended) The system of claim 96, wherein the evaluating unit ~~is configured to determine~~ determines a temporal cross correlation function between the ultrasonic waves and to define the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

105. (Original) The system of claim 96, wherein the ultrasonic transducer of the ultrasonic transmitting/receiving unit is mounted on an adjustable holder.

106. (Original) The system of claim 96, wherein the ultrasonic transmitting/receiving unit is a part of an imaging ultrasonic scanner.

107. (Original) The system of claim 96, wherein the ultrasonic transducer is a pin probe.

108. (Original) The system of claim 96, further comprising an X-ray locating device.

109. (Currently Amended) The system of claim 94, wherein the evaluating unit ~~is configured to provide~~ provides an error signal if, after emission of a shockwave, a relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined second threshold value.

110. (Currently Amended) The system of claim 109, wherein the evaluating unit ~~is further configured to average~~ averages the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a plurality of shockwaves.

111. (Currently Amended) The system of claim 109, wherein the evaluating unit ~~is further configured to standardize~~ standardizes the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference relaxation time of a reference correlation coefficient curve.

112. (Currently Amended) The system of claim 109, further comprising means for the continuous representation of the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a treatment duration.

113. (Original) The system of claim 109, further comprising an alarm device in communication with the evaluating unit and supplied with the error signal.

114. (Currently Amended) The system of claim 113, wherein the alarm device ~~is configured to output~~ outputs an optical alarm or acoustic alarm.

115. (Currently Amended) The system of claim 109, wherein the evaluating unit ~~is configured to determine~~ determines the relaxation time ($T_R$) by adapting a fit curve or a curve of the form $1 - A^{(-1/T_R)}$ to the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ with time.

116. (Currently Amended) The system of claim 109, wherein the evaluating unit ~~is further configured to smooth~~ smoothes the variation of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

117. (Currently Amended) The system of claim 109, wherein the shockwave generator is in communication with the evaluating unit and ~~configured to stop or continue~~ stops or continues the generation of shockwaves dependent on the error signal.

118. (Original) The system of claim 109, wherein the evaluating unit comprises adjusting means for adjusting the second threshold value.

119. (Currently Amended) The system of claim 109, wherein the evaluating unit ~~is configured to determine~~ determines a temporal cross correlation function between the ultrasonic waves and to define the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

120. (Original) The system of claim 109, wherein the ultrasonic transducer of the ultrasonic transmitting/receiving unit is mounted on an adjustable holder.

121. (Original) The system of claim 109, wherein the ultrasonic transmitting/receiving unit is a part of an imaging ultrasonic scanner.

122. (Original) The system of claim 109, wherein the ultrasonic transducer is a pin probe.

123. (Original) The system of claim 109, further comprising an X-ray locating device.

124. (Currently Amended) A hit control method for a lithotripter, the hit-control method monitoring effects of a shockwave to a target area inside a body of a patient, comprising:

providing a shockwave generator;

providing an ultrasonic transmitting/receiving unit comprising an ultrasonic transducer;

providing an evaluating unit, in communication with the ultrasonic transmitting/receiving unit and the shockwave generator;

emitting ultrasonic pulses from the ultrasonic transducer into a body;

receiving ~~the~~ ultrasonic waves reflected from a target ~~object~~ area in the body in which a target object is located via the transducer;

evaluating the received ultrasonic waves ~~with~~ via the evaluating unit to determine a ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ of a time correlation between a first reflected ultrasonic wave $e_1(t)$ and a second reflected ultrasonic wave $e_2(t)$, the reflected ultrasonic waves corresponding to successively emitted ultrasonic pulses that are reflected in the target area in which a target object is located, and the correlation being determined for a certain interval of time, wherein the correlation coefficient $K_{1,2}$ is determined by $\int_{T_1}^{T_2} e_1(t) * e_2(t)dt$, and wherein the interval of time is determined by the points in time $T_1$ and $T_2$; ~~the ultrasonic waves and the ultrasonic pulses;~~ and

providing a signal related to the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ from the evaluating unit.

125. (Currently Amended) The method of claim 124, wherein evaluating the received ultrasonic waves comprises determining the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ based on the ultrasonic waves assigned to the ultrasonic pulses directly succeeding one another.

126. (Currently Amended) The method of claim 124, wherein evaluating the received ultrasonic waves comprises determining a temporal cross correlation function between the ultrasonic waves and defining the maximum value of the temporal cross correlation function as the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$.

127. (Currently Amended) The method of claim 124, further comprising continuously representing the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ during a shockwave treatment of the body.

128. (Currently Amended) The method of claim 124, further comprising continuously representing the relaxation time($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ during a shockwave treatment of the body.

129. (Currently Amended) The method of claim 124, further comprising:

providing a display device in communication with the evaluating unit;

positioning the body within a focus of the shockwave generator;

displaying the target object and the focus on the display device;

adjusting the position of the body to place the target object within the focus of the shockwave generator;

determining the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ after the emission of a shockwave from the shockwave generator; and

storing the minimum value as a reference minimum value.

130. (Original) The method of claim 129, further comprising standardizing the minimum value of a second correlation coefficient (K'), measured at a later time, to the reference minimum value.

131. (Currently Amended) The method of claim 129, further comprising continuously representing the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ during a shockwave treatment of the body.

132. (Currently Amended) The method of claim 124, further comprising:

providing a display device in communication with the evaluating unit;

positioning the body within a focus of the shockwave generator;

displaying the target object and the focus on the display device;

adjusting the position of the body to place the target object within the focus of the shockwave generator;

determining the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ after the emission of a shockwave from the shockwave generator; and

storing the relaxation time ($T_R$) as reference relaxation time.

133. (Original) The method of claim 132, further comprising standardizing the relaxation time ($T_R$) of a second correlation coefficient (K'), measured at a later time, to the reference relaxation time.

134. (Currently Amended) The method of claim 132, further comprising continuously representing the relaxation time($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ during a shockwave treatment of the body.

135. (Currently Amended) The method of claim 124, further comprising providing an error signal from the evaluating unit to the shockwave generator if, after emission of a shockwave, the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined first threshold value.

136. (Currently Amended) The method of claim 135, further comprising averaging the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a plurality of shockwaves.

137. (Currently Amended) The method of claim 135, further comprising standardizing the minimum value of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference minimum value of a reference correlation coefficient curve.

138. (Currently Amended) The method of claim 124, further comprising providing an error signal from the evaluating unit to the shockwave generator if, after emission of a shockwave, the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ is not less than a predetermined second threshold value.

139. (Currently Amended) The method of claim 138, further comprising averaging the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ over a plurality of shockwaves.

140. (Currently Amended) The method of claim 138, further comprising standardizing the relaxation time ($T_R$) of the ~~correlation coefficient (K)~~ correlation coefficient $K_{1,2}$ to a reference relaxation time of a reference correlation coefficient curve.

141. (New) The system of claim 1, wherein the correlation coefficient $K_{1,2}$ is standardized by means of the factor $\left(\int_{T_1}^{T_2} e_1^2(t)dt\right)^{\frac{1}{2}}\left(\int_{T_1}^{T_2} e_2^2(t)dt\right)^{\frac{1}{2}}$.